



Distr.
GENERAL

TIM/SEM.1/2003/R.26 (Summary)
13 January 2003

Original: ENGLISH

Seminar on
STRATEGIES FOR THE SOUND USE OF WOOD
Poiana Brasov, Romania
24-27 March 2003

Use of wood and wood products in the light of the climate change discussion
Session III

Paper by Ms. Hillevi M Eriksson
Climate change expert, the National Board of Forestry, Sweden

Summary

Within the Kyoto Protocol, we find quantified first-step commitments by industrialised countries to reduce net greenhouse gas emissions. To reach the committed levels, most countries must start to reduce their use of fossil fuels. Fossil-fuel combustion accounts for a major part of net carbon dioxide emissions. Wood-based biofuels may therefore have an important role to play. The Kyoto protocol also includes options to receive credits for increasing carbon (C) pools in forests and soils. Pools of harvested wood products will not be included in the first commitment period (2008-2012).

The use of wood-based products (excluding biofuels) could affect the global C budget in several ways. Most often considered is the possibility to increase the stock of harvested products. Another suggested option is that an increased demand for sawmill products would result in longer rotation periods, and thus increased C stocks of the forests. However, potentially far more important for serious attempts to combat climate change are: a) the low energy requirements for producing wood as compared to other construction materials (metals, concrete), and b) the high production of by-products, useable as biofuels, in the traditional forest industry (harvest residues, bark, saw-dust, lignin, residue wood, etc).

Two major adverse effects could follow from incentives to increase C stocks in general: I) Although increasing the C stock could be cheap (compared to decreasing fossil fuel use) in the near-term perspective, the cost of maintaining the increased stock could make it an expensive option in the long run. II) In certain cases, a stock increase may lower the production potential of low-cost biofuels.

Because the global potential is very limited, a credit system for increasing the product pool in a coming protocol could create high accounting costs for little mitigation value. Incentives to increase the wood stock in buildings could also have non-desired effects on energy consumption. Fossil-based production of heat for a single-family house in Sweden emits roughly the same amount of C, annually, as the total C content of the house. Thus, heat energy efficiency of the house (per capita) and choice of energy source for heat and electricity production is far more important than the C content of the house for the long-term C balance of the earth.

Sound arguments for promoting increased market shares for wood products are:

1. Wood requires little energy for its production and use.
2. Wood-based products become low-cost biofuels after use.
3. A higher consumption rate of pulp-based and wood products results in larger offers of low-cost biofuels, and thus reduces the cost of an acceptable energy system.

Key words: biofuel, climate change, forest, HWP, industry, mitigation, wood products,
